A ortic stenosis or narrowing of the aortic valve is a heart condition that affects the aortic valve, disrupting normal flow of blood from heart to the rest of the body; and it can be fatal if not treated immediately. Aortic valve is an age progressive heart disease that usually impacts senior citizens over the age of 65, but it has also been observed in younger adults with birth defects in their heart valve or in people who have had suffered from rheumatic fever in their childhood.

#TreatmentZarooriHai, a public awareness campaign by Meril, aims to spread awareness amongst Indian citizens on specific diseases related to heart (aortic stenosis and coronary artery disease) and large joints (hip



Issued in public interest, for you and your loved ones, by Meril.

replaced valve. Instead of performing another open-heart surgery, a transcatheter valve is inserted within the existing surgical valve, restoring proper blood flow and alleviating symptoms.

How is ViV TAVR performed? The ViV procedure involves threading a

TAVR: A minimally invasive solution for AS

Aortic stenosis is a condition characterised by the narrowing of aortic valve in the heart. This narrowing restricts blood flow from the left ventricle to the rest of the body, putting additional strain on the heart and potentially leading to related symptoms

and knee) through reliable and helpful information. The campaign #TreatmentZarooriHai intends to bridge the gap between patients, caregivers, and medical fraternity; and people can visit **www.treatmentzaroorihai.com** to read and learn more on the diseases and available treatment.

Interventional cardiologists recommend that citizens over the age of 45 should also keep checking for aortic stenosis during their annual medical examination to eliminate the possibility of this heart disease. Termed as a silent killer. aortic stenosis does not showcase any early symptoms, and in later stages, severity of the condition requires a correctional surgery for survival.

According to the Global Burden of Disease, nearly 24.8 per cent of all deaths

in India are related to cardiovascular diseases and as per a report by Indiatimes, around five to seven per cent of our elderly population (nearly 60 lakh people) in India suffer from aortic stenosis.

Valve-in-valve Transcatheter Valve (ViV) is a technique used to treat aortic stenosis (AS) in patients who have previously undergone surgical aortic valve replacement (SAVR) but require a new valve due to degeneration of catheter through a blood vessel, typically in the groin and guiding it to the site of the previously implanted surgical valve. The transcatheter valve is then positioned inside the old valve and expanded, effectively replacing it and allowing for improved blood flow.

The ViV technique offers several benefits, including reduced invasiveness compared to repeat open-heart surgery, shorter recovery time, and potentially fewer complications. It provides a valuable treatment option for patients who may not be suitable candidates for additional surgical procedures.

Patient Testimony

A 72-year-old man presented with a medical history of diabetes, hypertension, and ischemic heart disease, underwent bypass graft surgery and aortic valve re-

placement in 2007. Approximately one year ago, he began experiencing symptoms of heart failure. Upon evaluation, it was discovered that his aortic valve (bio-prosthesis) had degenerated and re-stenosed, accompanied by aortic regurgitation. He also exhibited significant dysfunction in both the right and left ventricles, along with moderate pulmonary arterial hypertension. Transcatheter aortic valve replacement was strongly recommended as a priority treatment.

Regrettably, the patient initially disregarded this advice and returned a few months later with renal failure requiring dialysis and severely impaired contractility in both ventricles due to advanced, severe bioprosthetic degeneration. He presented critical aortic re-stenosis and mild to moderate aortic regurgitation. During his hospitalisation for approximately 10-12 days, the patient received various medications to alleviate congestion and improve left ventricular contractility. underwent hemodialvsis for acute kidnev issues. and intermittently required ventilator support. Despite almost a week in the Coronary Care Unit. his recovery was unsatisfactory with medication alone. However, during this admission, he agreed to undergo transcatheter aortic valve replacement, which was successfully performed on day 12 of his hospital stay, within the previously implanted surgical bioprosthesis.

In less than 24 hours after the procedure, his blood pressure and urine output stabilised, allowing the withdrawal of supportive measures. His general condition improved, along with positive changes in hemodynamic parameters. Within 48 hours, he was able to walk approximately 20-22 steps; and within 72 hours, there was a significant improvement in left ventricular contractility. He was discharged within three days.

Presently, several months later, he started experiencing and enjoying a symptom-free life and can now walk approximately 4-5 kilometers daily. Initially, his condition seemed untreatable with the available resources. However, due to the non-invasive approach of TAVR for critical aortic valve stenosis, his condition dramatically improved, allowing him to lead a normal life. His kidney function has normalised, eliminating the need for dialysis. He actively engages in driving, rides a two-wheeler, shops for daily necessities, and spends quality time with friends and family.

Disclaimer: The view/suggestions/opinions expressed in the article are the sole responsibility of the brand concerned this should not be considered a substitute for medical advise. Please consult your treating physician for more details.



Dr Suhas Hardas Director Cardiology Department Sahyadri Hospitals Pune